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Annual Report

FISCAL YEAR 1970

TO THE HONORABLE

FORREST H. ANDERSON, GOVERNOR

FROM THE

MONTANA AERONAUTICS COMMISSION

Montana State Library



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STATE OF MONTANA

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JOHN HEBBELMAN, JR., VICE-CHAIRMAN
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HELENA
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HELENA

AERONAUTICS COMMISSION

P. O. BOX 1698

HELENA, MONTANA 59601

TELEPHONE 406-449-2506

September 1, 1970

The Honorable Forrest H. Anderson
Governor of the State of Montana
State Capitol Building
Helena, Montana 59601

Dear Governor Anderson:

In accordance with the requirements of Section 1-202 of the State Aeronautical Regulatory Act, R.C.M. 1947, there is herewith transmitted to you the report of the Montana Aeronautics Commission covering the fiscal year ended June 30, 1970.

A program inventory and cost summary is depicted in Item 7 and a recap of program costs by object of expenditure and source of funding is included in Item 11 of the report.

Legislative recommendations for increasing, decreasing and improving of present services and a review of obsolete statutes concerning aeronautics in Montana have been included in Item 9 of the report.

Respectfully submitted,

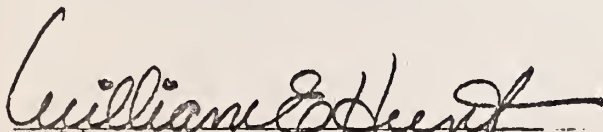

William E. Hunt, Director

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Principal Offices and Officers

MONTANA AERONAUTICS COMMISSION

Officer/Term of Office	Home Address
Clarence R. Anthony, Chairman 7-1-67 - 6-30-71	514 Hayes Avenue Helena, Mont. 59601
Jack R. Hughes, Vice Chairman 7-1-67 - 6-30-71	340 W. Central Avenue Missoula, Mont. 59801
James A. Steffeck, Secretary 7-1-69 - 6-30-73	P.O. Box 1154 Helena, Mont. 59601
Robert G. Bricker, Member 7-1-69 - 6-30-73	Johnson-Bell Field Missoula, Mont. 59801
John Hebbelman, Jr., Member 7-1-69 - 6-30-73	Chinook, Mont. 59523
Dr. B. P. Little, Member 7-1-69 - 6-30-73	1007 4th Avenue North Glasgow, Mont. 59230
David L. Matovich, Member 7-1-69 - 6-30-73	244 West 4th Avenue North Columbus, Mont. 59019

Principal Administrative Officers

Charles A. Lynch, Director (hospitalized following aircraft
accident 9-23-69).
William E. Hunt, Director (named Director 2-11-70).
James H. Monger, Assistant Director, Airports Division
Jack Wilson, Chief, Safety and Education

Principal Office

City/County Airport, Helena

LEGAL REFERENCES

GENERALLY

The statutes relating to the operations of the Aeronautics Commission are, for the most part, contained in Section 1-100 through 1-821 and various parts of Sections 11, 26, 45, 46, 84, and 94 of the State Aeronautics Regulating Act of the 1947 revised codes of the State of Montana.

PROGRAMS

ADMINISTRATION:

Section 1-204 RCM 1947, general powers and duties of the commission.

SAFETY AND EDUCATION:

Section 1-301 regulation of aircraft, airmen, airports, and air instruction.

AIRPORT DEVELOPMENT:

Section 1-801 Municipal Airports Act.

AIRPORT OPERATIONS:

Section 1-401 acquisition and operation of state airports.

NAVIGATIONAL AIDS:

Section 1-809 Municipal Airport Act.



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PRINCIPAL GOALS

The Commission shall have the general supervision over aeronautics within the state. It is empowered and directed to encourage, foster and assist in the development of aeronautics in the state and to encourage the establishment of airports and other air navigation facilities. It shall cooperate with and assist the federal government, the political subdivisions of the state and others engaged in aeronautics or the promotion of aeronautics and shall seek to coordinate the aeronautical activities of these bodies. It may perform such acts, issue and amend such orders and make, promulgate and amend such reasonable general or special rules, regulations and procedures and establish such minimum standards consistent with the provisions of this act as it shall deem necessary to carry out the provisions of this act, and to perform its duties hereunder...

PROGRAM INVENTORY AND COST SUMMARY

<u>Program</u>	<u>Cost</u> <u>1969-70 F.Y.</u>
Program I Administration Division - 00.....	\$144,810.
Program II Safety & Education Division - 01.....	83,850.
Program III Airport Development - 02.....	286,903.
Program IV Airport Operations - 03.....	39,869.
Program V Nav Aids - 04.....	22,318.
	<hr/>
TOTAL.....	\$577,749.

MAJOR ACCOMPLISHMENTS

ADMINISTRATION PROGRAM I -- 00

Air Carrier Hearings

The Aeronautics Commission continues to assist the local Montana air carrier airports in Civil Aeronautics Board hearings. All testimony given has been to further air service improvement in Montana, primarily from the California markets.

Third Level Carriers

The Montana Aeronautics Commission fought against losing Frontier Airlines in the seven Eastern Montana cities. The Civil Aeronautics Board eventually allowed Frontier to suspend service temporarily from the Eastern Montana market. Apache Airlines, a third level or commuter carrier, was successful in a bid to replace Frontier.

Other third level carriers operating in Montana during the past biennium have been Fowler Aircraft of Lethbridge, Combs Airways, Inc., of Billings, and Commute Air of Spokane. Commute Air terminated service and following a hearing a Certificate of Convenience and Necessity was revoked by the Aeronautics Commission in the fall of 1969. Fowler Aircraft serves Great Falls from certain Canadian points. Combs' Eastern Montana route was taken over by Apache. Combs continues to carry the air mail on a contract basis.

A multitude of third level carriers have displayed interest in serving Montana but thus far, the Aeronautics Commission has had to hold hearings on only the cases of Combs, Commute Air and Apache.

Aircraft Operations

The Aeronautics Commission provides transportation for the Governor's office in addition to cooperating with other state agencies in providing administrative and emergency air transportation. Air transportation provided in the Commission aircraft for other state departments has been on a cost basis to the department involved with the exception of the Governor's office.

The following is a statistical report of aircraft usage for fiscal year 1970.

AIRCRAFT OPERATIONS REPORT

7-1-69 through 6-30-70

Aircraft	ADM	A/C Div	S & E	APTS	Other Depts.	Grand Total
65 Beech	223.2	48.1		2.6	120.2	394.1
*185 Cessna	8.4	1.1	10.2	27.3	26.1	73.1
206 Cessna	60.0	29.3	119.9	50.6	67.8	327.6
Rental/Lease	28.0	14.0	3.5	28.4	16.4	90.3
TOTAL:	319.6	92.5	133.6	108.9	230.5	885.1

*Aircraft demolished in aircraft accident.

Explanatory Notes:

ADM - Administration: Includes travel of the Governor and the Aeronautics Commission to official functions.

A/C Div - Aircraft Division: Ferry time for aircraft maintenance and annual proficiency checks for assigned pilots.

S & E - Safety and Education: Search and rescue, Veterans Administration Flight Training Program inspections, law enforcement and aviation education.

APTS - Airports: Site investigations, community assistance, project surveys, airport inspections and airport and nav-aid maintenance supervision.

Other Depts.: Air transport support for State Departments other than the Office of the Governor and the Aeronautics Commission on a reimbursable basis.

Rental: Rental or lease of aircraft from commercial operators.

SAFETY AND EDUCATION PROGRAM II -- 01

Pilot Registration

2,690 pilots were registered as of June 31, 1970. Pilot registration commences on January 1 and registration totals are compiled and recorded on the basis of the calendar year.

Aircraft Registration

1,203 aircraft were registered as of June 31, 1970. Aircraft registration commences on January 1, therefore, the figure for registration is compiled and recorded on the basis of the calendar year.

Commercial Air Operators Insurance

A total of 160 commercial air operators filed evidence of compliance with the Aeronautics Commission as of June 31, 1970. This figure is based on the calendar year.

Veterans Administration Flight Training

The Montana Aeronautics Commission is the State Approving Agency for all Veterans Administration Flight Schools that furnish flight instruction to veterans under the provisions of Public Law 88-352.

An average of 21 Flight Schools were approved during fiscal year 1970. Each school was visited by the Chief of Safety and Education approximately 2½ times during the fiscal year.

Search and Rescue

The Aeronautics Commission is responsible for the conduct of, and the gas and oil expended, during an aerial search for missing aircraft within the state. Numerous telephone searches are conducted for overdue aircraft.

There were two actual aerial searches conducted during the fiscal year 1970. Total expended was \$350.38.

Flight Plan Service

2,940 total flight plan calls were filed and/or closed during fiscal year 1970. Total telephone costs amounted to \$1,666.48 and averaged 57¢ per call.

Aviation Mechanics Refresher Seminar (AMRS)

The Aviation Mechanics Refresher Seminars were inaugurated in the United States by the Aeronautics Commission in 1963. Seminars were repeated in 1964, 1965, 1966 and 1970.

The 1970 Seminar was held in two separate locations, Missoula and Billings, as the greatest number of mechanics are employed at these two locations. This was a convenience to the attending mechanics and provided a substantial financial saving to the Aeronautics Commission.

50 mechanics attended the 1970 Seminar, 23 at Missoula on January 8, 9, 10, and 27 at Billings on January 11, 12 and 13.

Film Library

"Montana and Its Aircraft" sponsored by the Aeronautics Commission has grown to be extremely popular in state and out of state with the initial seven prints being completely scheduled through the school year by December. An additional ten prints were purchased at the end of the fiscal year in order to handle the numerous out of state requests.

The two Commission sponsored films, "Montana and Its Aircraft" and "Montana and the Sky", enjoyed a 40% increase in use to viewers in 40 states during fiscal year 1970.

"Montana and Its Aircraft" has been selected by the Library of Congress for its permanent selection and for future research use.

Aviation related films in our library are available on a free loan basis to schools, private groups and interested organizations. They were shown 1,345 times to an audience of approximately 89,000 persons this fiscal year. This number does not include TV usage.

Four Sikorsky helicopter films were loaned to the Aeronautics Commission on an extended loan for use in Montana.

Aviation Education

Following is a brief outline of the sub-programs under the Aviation Education Program. The sub-programs function to achieve the general objective of promoting

aviation and aerospace education in our Montana schools.

Teacher Training

Three teacher work shops were conducted during fiscal year 1970; Northern Montana College, Eastern Montana College and Western Montana College. Total teacher enrollment was 77.

The summer teacher training program was extended in scope. The course at Western Montana College was a second level course in a new 3-level sequence.

Aviation Science

Six additional schools inaugurated Aviation Science courses into their curriculum during 1969-70 school year. The new courses were offered at Flathead High School, Billings West High School, Central Catholic High School in Billings, Victor High School, Lincoln County High School and Baker High School. The National Aeronautics and Space Administration Space-mobile lecture was scheduled for 29 schools.

Flying Classrooms

Six high schools participated in the Flying Classroom Program during the 1969-70 school year. 180 students participated. The classrooms were conducted with the assistance of the Aeronautics Commission aircraft and personnel. As each of these flying classrooms involved the direct participation and planning assistance of the Aviation Education Supervisor, this is a major program during the year. Assistance is also available to schools which have previously held flying classrooms.

Youth in Aviation Award

The Youth in Aviation Award contest involved 13 schools this fiscal year. The Aviation Education Supervisor administered local tests and state tests for this program and involved his participation during the greater part of the spring and summer. As a result of the FY-70 program, 39 students were awarded three hour cross-country flights; 12 students were awarded 10 hour flight instruction scholarships; and one private pilot scholarship amounting to 40 hours of instruction was awarded.

Elementary Education

In addition to development of elementary materials in summer courses, loan materials for elementary teachers are mailed through the office.

Vocational-Technical Training

The Supervisor participated as a member of the Aviation Advisory Committee for the Missoula Technical Center.

Materials Procurement, Development and Distribution

The office of the Aviation Education Supervisor acquires large numbers of free and inexpensive teacher aid material by surveying the aerospace industry and requesting bulk supplies. The materials are then passed on to teachers at the courses and seminars and in answer to individual requests. In addition to the numerous in state requests, the Supervisor answered information and material requests from 13 other states.

The office also develops curriculum guides and classroom material.

Publications and Information

Newsletter: Monthly publication entitled "Montana and the Sky" reached an average circulation of approximately 5,000 in fiscal year 1970.

Tourist pilot inquiries have shown a marked increase in 1970. These requests are answered by letter regarding explicit questions on airport or airstrip conditions and questions relative to their chosen locations or activity. A packet is forwarded in answer to each request containing a chart and/or directory and the appropriate brochures on parks, cities to be visited, Fish and Game information, skiing and winter activities and events.

Publications, including aeronautical charts, directories, Commission publications and FAA training guides were sold during fiscal year 1970 in the total amount of \$521.65.

"Businesslike Approach to Small Shop Work Orders" - a 30 page booklet written by former Director Charles A. Lynch was completed and distributed in October, 1969.

AIRPORT DEVELOPMENT PROGRAM III -- 02

The Airport Division administers policies and standards as applied to airport planning, site selection, design, specifications, construction, operation, maintenance, improvements, safety and financing on all Montana airports.

The engineers of the Airport Division advise and assist owners and prospective owners of airports, public and private, in the selection of new airport sites and assist consulting engineers.

During fiscal year 1970 the Division participated in the establishment and construction of two new airports located in Philipsburg and Fairview.

Planning was completed and construction was started on several of the air carrier airports in Montana. Major improvements were necessitated by the advent of the jet air carriers now flying into Montana.

Engineering Grants

The Aeronautics Commission has a limitation of \$5,000 annually for engineering grants in the amount of \$1,000 for each grant.

Engineering grants allowed during the fiscal year 1970 were:

MAC Proj. No. 292-7-69	Missoula	\$1,000
MAC Proj. No. 293-9-69	Miles City	\$1,000
MAC Proj. No. 294-12-69	Harlowton	\$1,000
MAC Proj. No. 295-4-70	Bozeman	\$1,000
MAC Proj. No. 296-5-70	Livingston	\$1,000

Loan Program

The Aeronautics Commission is able to loan money to a local Airport Board for development of any airport project.

Airport improvement loans are repayable annually at 4.5% interest. The length of the loan is for ten years or less. Communities or counties involved may use state funds along with available local funds for any particular airport project.

Airport improvement loan granted during fiscal year 1970:

MAC Proj. No. 292-7-69 Missoula \$8,811

Heliports

The Montana Aeronautics Commission assists local hospital boards and cities by providing technical assistance in the design of hospital heliports. Construction supervision is provided by Aeronautics Commission engineers and the construction cost is borne by the participating hospital. Hospitals participating on the program by the end of fiscal year 1970 were Kalispell (General Hospital), Deer Lodge (State Prison Farm), Galen (State Hospital), and Cut Bank (Memorial Hospital).

During fiscal year 1970, plans and specifications were completed for proposed heliports at Whitefish and Missoula. A proposed heliport at Swan Lake is presently in the engineering stage.

AIRPORT OPERATION PROGRAM IV -- 03

State Airports

The Montana Aeronautics Commission has a statutory authority and responsibility to construct and maintain state-owned airports. These normally are confined to strategic locations due to: An aviation traffic need; adjacent to recreational areas; an emergency value due to a critical location on a high use VFR flight route; a location of convenience and necessity lending accessibility to the area.

These projects may be completed solely on a state basis or in conjunction with another department of the United States Government, or local Airport Board, or other government bodies. All engineering, construction, contracting, inspection, ownership, costs and administration are under the jurisdiction of the Aeronautics Commission.

The State Airport Program was implemented in 1957 and since that time 14 projects have been initiated. The project at Dillon concerned only the administration building. The airport at White Sulphur Springs has since been turned over to the city and Meagher County.

The maintenance and the operation of the 12 existing state-owned airports is the responsibility of the Airport Operations Program.

Airmarking

The maintenance of the 230 roof tops airmarked throughout the state are the responsibility of the Airport Operations Program. The airmarkers are placed in the majority of the smaller towns and many of the larger ranches in Eastern Montana. The higher mountainous areas throughout Western Montana are airmarked through a series of identification numbers on Forest Service look-out towers.

Airport Services

The maintenance, repair and replacement of the various airport services are the responsibility of the Airport Operations Program personnel.

These services include:

Pilot Registration Desks

The Aeronautics Commission, following a suggestion by the Montana Pilots Association, implemented the program of pilot registration desks in 1965. The Commission provides a simple self-supported registration desk on every public airport in Montana that does not have a full time attendant, thus providing a record of the aircraft and number of people using the public airports throughout the state. The airmarking and airport maintenance summer crews installed the registration desks and checks for maintenance.

Airport Name Stone Markers

Stone markers, stones approximately 8 to 16 inches in size, denote the name of the airport with letters 10 feet high and painted a bright yellow, are placed on remotely located airstrips.

Fiberglass Cone Runway Markers

The Airport Division of the Aeronautics Commission designed a new cone runway marker for use on the general utility airports. The new cone runway marker proved to be a saving of over \$30 per marker over the previously used flush markers, required a great deal less maintenance and were far more visible during snow conditions.

At the end of fiscal year 1970, 23 airports had been installed with the new fiberglass runway markers by the airmarking and airport maintenance summer crews.

A number of Flying Farmers have since purchased and installed the new type runway marker on their personal airstrips.

Wind Cone Standards

The Aeronautics Commission supplies prefabricated wind cone standards to public airports upon request. The standards are erected free of charge by the Commission on any approved public use airport that does not presently have a wind cone standard. Private use airports may purchase standard, installed, for \$150. At the close of 1970 there were a total of 70 wind cone standards installed on public use airports throughout Montana.

Airport Directory

The Aeronautics Commission Airport Division publishes an Airport Directory containing individual drawings of the public use airports in the state. Included in the Directory is technical information that is of vital importance to pilots flying in Montana.

It is the responsibility of the personnel of the Airport Operations Program to compile the revisions for distribution on an annual basis.

NAVIGATIONAL AIDS PROGRAM V -- 04

The Montana Aeronautics Commission developed a program within the Airport Division for the purpose of providing instrument and visual navigation aids in locations that are not covered by the federal system. During fiscal year 1970 three state-owned nondirectional, low frequency, homer beacons (H-markers) were installed. They were located at Glasgow, Roundup and Broadus. The installations at Roundup and Broadus were VFR and the installation at Glasgow was a public use IFR.

Airway Beacons

The Federal Aviation Administration continues to operate eight airway beacons in the western part of the state and has abandoned 29 airway beacons in Montana. The Aeronautics Commission obtained the abandoned beacons, 16 of which went to various airports and 12 were retained as airway beacons in their specific locations for continued use as navigational aids for night VFR flying.

The maintenance of the beacons are the responsibility of the Nav Aids Program.

Airport Beacons

The Aeronautics Commission, upon request by a local Airport Board, will assist in providing an airport beacon to any public airport installing a complete lighting system. At the close of fiscal year 1970 Montana had 70 public airports with rotating beacons.

Unicom Program

The modernization and replacement of early radio equipment, which commenced in 1960, was continued with new radios being installed at Roundup, Lewistown and Broadus. Improvements were made at Chinook, Geraldine, Glendive, West Yellowstone, Butte and Chester.

MAJOR RECOMMENDATIONS

The following recommendations requiring Legislative action have been acted upon and approved by the Montana Aeronautics Commission for submission to the 1971 Legislative Assembly.

The following recommendations requiring Executive action have been proposed following the recommendations received from the Legislative Auditor and by action of the Aeronautics Commission for improvement of inner departmental practices and in behalf of aviation in Montana.

ADMINISTRATION PROGRAM I

REQUIRED IMPLEMENTATION ACTION: LEGISLATIVE

PRIORITY RATING: 5 of 8

CATEGORY: INCREASING EXISTING SERVICES

Recommendation: That the Legislature amend Section 1-201, R.C.M. 1947, to increase the per diem allowed each Commission Member to \$25 a day plus actual expenses up to \$1,500 per year.

Discussion: This increase is recommended due to additional meetings of the Aeronautics Commission and the general cost of living increase.

REQUIRED IMPLEMENTATION ACTION: LEGISLATIVE

PRIORITY RATING: 4 of 8

CATEGORY: INCREASING EXISTING SERVICES - PROVIDING GREATER AUTHORITY TO ADMINISTER EXISTING PROGRAMS

Recommendation: That Section 1-323, R.C.M. 1947, be amended to include the following: The Commission may issue a temporary certificate of public convenience and necessity without notice or hearing to the applicant for a certificate under this act and the holder of such a temporary certificate

may operate until its application is either granted or denied by the Commission.

Discussion: This recommendation is submitted following a proposal by the attorneys for the Montana Aeronautics Commission.

REQUIRED IMPLEMENTATION ACTION: EXECUTIVE

CATEGORY: IMPROVING COORDINATION WITH OTHER AGENCIES OR PROGRAMS - INCREASING EXISTING SERVICES

Recommendation: The Legislative Auditor submitted a number of recommendations concerning accounting and recording practices of the Aeronautics Commission. Action has been implemented on the majority of the accounting recommendations and the balance will be implemented within the ensuing fiscal year.

REQUIRED IMPLEMENTATION ACTION: EXECUTIVE

CATEGORY: IMPROVING COORDINATION WITH OTHER AGENCIES OR PROGRAMS - INCREASING EXISTING SERVICES

Recommendation: A new program entitled Executive Travel to be initiated in fiscal year 1971.

The Transportation portion of the Aeronautics Commission is presently included in the Administration Program.

SAFETY AND EDUCATION PROGRAM II

REQUIRED IMPLEMENTATION ACTION: LEGISLATIVE

PRIORITY RATING: 6 of 8

CATEGORY: DECREASING EXISTING SERVICES

Recommendation: The repeal of Section 1-301, R.C.M. 1947 and related articles that require the licensing and registration of the following: Federal licenses, permits or certificates of civil aircraft; air schools; aeronautics instructors; aircraft repair shops; aircraft, aircraft parts and sales dealers; and other persons operating in aviation.

Discussion: The Federal Government occupies the field of determining the fitness of pilots and the airworthiness of aircraft and the Montana statute requiring registration of the federal licenses and certificates do not in any way contribute to the minimum federal standards for safety and competence. Since state registration of federally qualified pilots and aircraft adds nothing to the safety of Montana aviation and produces little, if any, net income, the Commission does not believe it would be justified in expending any amount of man power or money on enforcing this requirement.

Qualified pilots who aid in search and rescue are made known to the Commission through the registration of airmen. The annual registration of airmen keeps the Search and Rescue Program aware of man power available to help in search and rescue. In addition, the pilot receives upon registration, an Airport Directory and an Aeronautical Chart which is not otherwise available to him. It is the opinion of the Commission that this service which sponsors and promotes aviation in keeping with the mandate of the Legislature to the Aeronautics Commission, is a program which should be continued. The Commission recommends that the portion of Section 1-301, R.C.M. 1947, requiring the registration of airmen be continued.

REQUIRED IMPLEMENTATION ACTION: EXECUTIVE

CATEGORY: INCREASING EXISTING SERVICES -
IMPROVING COORDINATION WITH OTHER
AGENCIES AND/OR PROGRAMS

Recommendation: Inauguration of a new program, Aviation and Space Education, to be initiated in fiscal year 1971. The new program is an expansion of the existing Aviation Education portion of the present Safety and Education Program.

Discussion: The separation of the Aviation Education (Aviation and Space Education) will be separated from the Safety and Education Program pursuant to a Budget Office recommendation.

AIRPORT DEVELOPMENT PROGRAM III

REQUIRED IMPLEMENTATION ACTION: LEGISLATIVE

PRIORITY RATING: 1 of 8

CATEGORY: INCREASING EXISTING SERVICES -
IMPROVING COORDINATION WITH OTHER
AGENCIES AND PROGRAMS

Recommendation: Submit a budget request of \$65,000 for a comprehensive study under the Airport Development Aid Program.

Discussion: A comprehensive state plan study will be integrated into the National Airways Program. The recommended study is eligible for two-thirds matching federal funds.

REQUIRED IMPLEMENTATION ACTION: LEGISLATIVE

PRIORITY RATING: 2 of 8

CATEGORY: INCREASING EXISTING SERVICES -
PROVIDE GREATER AUTHORITY TO
ADMINISTER EXISTING PROGRAMS

Recommendation: That Section 1-205, R.C.M. 1947 be amended to include a paragraph to read as follows: A bill for an act entitled: "An act amending Section 1-205, R.C.M. 1947 to authorize channeling of federal airport funds for the development of public airports."

Discussion: In the event federal funds are channeled through the state, it is important that Montana have enabling legislation.

REQUIRED IMPLEMENTATION ACTION: LEGISLATIVE

PRIORITY RATING: 3 of 8

CATEGORY: INCREASING EXISTING SERVICES

Recommendation: Extend and overlay the Yellowstone Airport runway at West Yellowstone, Montana. \$750,000 is required to match federal funds, to be made available from the State of Montana General Fund.

Discussion: The improvement on the Yellowstone Airport has become necessary due to the utilization of larger aircraft by the airlines and to protect the existing runway surfaces.

AIRPORT OPERATIONS PROGRAM IV

REQUIRED IMPLEMENTATION ACTION: LEGISLATIVE

PRIORITY RATING: 7 of 8

CATEGORY: DECREASING EXISTING SERVICES

Recommendation: Request that an amount be set forth in the budget for appropriation from the General Fund sufficient to allow the Montana Aeronautics Commission to license airports and other navigational aids as set forth in the statute, Section 1-301, R.C.M. 1947.

In the event the Legislature is unable or unwilling to appropriate the sufficient funds from the General Fund, we recommend that Section 1-301 and all related articles relating to the licensing of airports and other navigational aids be repealed.

Discussion: The Aeronautics Commission has not licensed airports although authorized to do so by the statutes. Under the new Airport/Airways Bill, air carrier airports only will be licensed by the Federal Aviation Administration. All other airports in the state would not be licensed by the FAA. The Commission desires to study the matter further to determine if it is feasible to license the airports and what standards would be used to determine whether an airport is entitled to a license. The actual cost of licensing these airports is not known at the present time.

Virtually all of the air navigational facilities in the state are owned and operated by either the Federal Aviation Administration or the State Aeronautics Commission and therefore, no licensing is required.

NAVIGATIONAL AIDS PROGRAM V

REQUIRED IMPLEMENTATION ACTION: LEGISLATIVE

PRIORITY RATING: 8 of 8

CATEGORY: ADDING NEW SERVICES

Recommendation: VOR (VHF omnirange) stations would be beneficial at Glendive and one other location for navigation aid to both air carrier and general aviation aircraft. The expenditure of \$50,000 per installation, total of \$100,000, is recommended by the Aeronautics Commission to be paid from the State of Montana General Fund.

Discussion: The new airport at Glendive has had a tremendous increase in aircraft traffic, including small business jets. The higher performance aircraft are in need of a navigational aid in the form of a VOR and to establish an IFR approach and departure to the airport. The increase in air carrier traffic into Glendive is an additional justification for this navigation aid.

REQUIRED IMPLEMENTATION ACTION: EXECUTIVE
(As funds are available)

CATEGORY: ADDING NEW SERVICES

Recommendation: H-markers are needed at the following locations to assist in air navigation: Butte, Dell and Libby.

Discussion: The State of Montana is far from adequately covered by navigational aids for aviation. Eastern Montana and the Hi-Line area seriously need facilities to make cross-country navigation easier, more accurate and safer.

ANALYSIS OF PROGRAMS

ADMINISTRATION PROGRAM I -- 00

Aircraft Operations

The Montana Aeronautics Commission provides transportation for the Governor's office in addition to cooperating with the other State Agencies in providing administrative and emergency air transportation. Use of Commission aircraft provides safe, fast, economical means of transportation for State Departments' personnel; is necessary for search and rescue; Commission administrative operation; preliminary engineering of airports; airport site selection; checking of airports; flight patterns and facilities; and aerial photography.

Air transportation provided in the Commission's aircraft for other State Departments has been on a cost basis to the Department involved with the exception of the Governor's office.

A statistical report of aircraft usage as per our maintenance cost average is included in an earlier section of this Annual Report. (Page 6).

Air Service Study

Through the efforts of an economic consulting firm, T.A.P., Inc. of Bozeman, the Aeronautics Commission has studied the adequacy of scheduled air transportation within our state. Many statistics helpful to future air carrier hearings and cases have been gleaned from the report by various communities. The report was implemented and has been updated quarterly since its delivery in the fall of 1968.

Air Carrier Hearings

The Montana Aeronautics Commission has assisted the local Montana air carrier airports in Civil Aeronautics Board hearings the past biennium. All testimony given has been to cause improvement in the air service to Montana primarily from the California markets.

The Aeronautics Commission fought against losing Frontier Airlines in the seven Eastern Montana cities. The Civil Aeronautics Board eventually allowed Frontier

to suspend service temporarily from the Eastern Montana markets. Apache Airlines, a third level or commuter carrier, was successful in a bid to replace Frontier.

Other third level carriers operating in Montana the past biennium have been Fowler Aircraft of Lethbridge, Combs Airways out of Billings and Commute Air of Spokane. Commute Air has since gone out of business. Combs' Eastern Montana route was taken over by Apache but Combs continues to carry the air mail on contract basis. Fowler flies into Great Falls from certain Canadian points.

A multitude of third level carriers have displayed interest in serving Montana but thus far, the Montana Aeronautics Commission has had to hold hearings on only the cases of Combs, Commute Air and Apache. Considerable time, money and effort has been put forth by the Aeronautics Commission in the various third level hearings in order to improve service to the smaller air line airports.

TARGET GROUPS

The Target Groups for the Administration Program of the Aeronautics Commission are a combination of the flying public, all branches of the aviation industry, the general public and other branches of local, state and federal government. The Aeronautics Commission Administration Program carries out the Aeronautics Code of Montana through policies set by the Commission and procedures set by other state agencies. The flying public and all users of aviation and aviation facilities are assured by Administration that the operation of the Aeronautics Commission is conducted in accordance with all legislative and judicial rules and regulations and that the Commission operates in the best interest of fostering and promoting aviation.

COST SUMMARY:

The following data is presented in summary form. Additional supporting data is available upon request.

	Fiscal Years		
	1968-1969	1969-1970	1970-1971
Cost	\$ 148,971	\$ 144,810	\$ 198,561

Pilot Registration

As stated in Statute 1-301 of the Revised Codes of Montana, 1947, pilot registration is mandatory. Registration for the current year commences in January and the deadline date is April 1. Registration fee is \$1 per year. Funds derived from pilot registration are applied to the search and rescue fund. Registration figures are compiled and recorded on the basis of a calendar year. As of June 30, 1970 the total pilot registration was 2,696.

Aircraft Registration

Aircraft registration is mandatory. Registration for the current year commences in January and the deadline date is February 15. Aircraft registration is compiled and recorded on the basis of a calendar year. As of June 30, 1970 the total aircraft registered were 1,203.

Commercial Air Operators Insurance

Chapter 122 of the Session Laws of the 40th Legislative Assembly of the State of Montana, 1967, is an act empowering the State Aeronautics Commission to require commercial air operators to procure insurance or other adequate protection against liability for the payment of damages for personal body injuries, including death and property damage, as a result of an accident.

The Commission set forth the amount of insurance reasonably necessary to provide adequate compensation for damages incurred through an accident involving a commercial air operator. This insurance is mandatory for all operators carrying passengers, conducting agricultural spray operations or hauling freight. The requirements and amounts of insurance are contained in Montana Aeronautics Commission's regulation 9-100. One hundred sixty-one commercial air operators filed evidence of compliance with the Aeronautics Commission in 1970.

Search and Rescue

The Montana Aeronautics Commission has the obligation and the authority for the conduct of search and rescue for all civil aircraft in the State of Montana with the exception of certified air carriers or military aircraft. The actual aerial searches for missing aircraft are flown by volunteer civilian pilots in their personal planes. The

Aeronautics Commission is responsible for the conduct of the search and furnishes the gas and oil expended. The Commission is responsible for all telephone calls relative to any missing or overdue aircraft.

Pilot registration funds are applied to search and rescue expenditures. Total expended on search and rescue for fiscal year 1970 was \$350.38.

Flight Plan Service

The Montana Pilot Flight Plan Service, inaugurated by the Aeronautics Commission April 15, 1963, to encourage an increase in flight plans by pilots in Montana and to attempt to decrease the cost and time consuming processes involved in search and rescue.

Flight Plan Service was originally budgeted for an average of \$1 per call; through increased use of the service by Montana pilots the average to date is 71¢ per call. Totals for fiscal year 1970 are as follows: 2,940 calls - \$1,666.48 phone cost - 57¢ average per call.

Aviation Mechanics Refresher Seminar (AMRS)

The Aviation Mechanics Refresher Seminars were inaugurated in the United States by the Aeronautics Commission in 1963. Seminars were repeated in 1964, 1965, 1966 and 1970.

The 1970 Seminar was held in two separate locations, Missoula and Billings, as the greatest number of mechanics are employed at these two locations. This was a convenience to the attending mechanics and provided a substantial financial saving to the Aeronautics Commission.

50 mechanics attended the 1970 Seminar, 23 at Missoula on January 8, 9, 10, and 27 at Billings on January 11, 12 and 13.

Veterans Administration Flight Training

The Aeronautics Commission is the state approving agency for all Veterans Administration Flight Schools that furnish flight instruction to veterans under the provisions of Public Law 88-352.

The average of 21 Flight Schools were approved during fiscal year 1970. Each school was visited by the Chief of Safety and Education approximately two and one-half times during the fiscal year.

Film Library

"Montana and Its Aircraft" sponsored by the Aeronautics Commission has grown to be extremely popular in state and out of state with the initial seven prints being completely scheduled through the school year by December. An additional ten prints were purchased at the end of the fiscal year in order to handle the numerous out of state requests.

The two Commission sponsored films, "Montana and Its Aircraft" and "Montana and the Sky", enjoyed a 40% increase in use to viewers in 40 states during fiscal year 1970.

"Montana and Its Aircraft" has been selected by the Library of Congress for its permanent selection and for future research use.

Aviation related films in our library are available on a free loan basis to schools, private groups and interested organizations. They were shown 1,345 times to an audience of approximately 89,000 persons this fiscal year. This number does not include TV usage.

Four Sikorsky helicopter films were loaned to the Aeronautics Commission on an extended loan for use in Montana.

Aviation Education

The position of Aviation Education Supervisor exists by Memorandum of Agreement between the Superintendent of Public Instruction and the Montana Aeronautics Commission. The Memorandum of Agreement was dated April 29, 1966, resigned September 11, 1968, and revised April 15, 1969.

Under terms of the current agreement, the Supervisor is assigned to the office of the State Superintendent of Public Instruction and is responsible directly to the Superintendent of Public Instruction with the program financed by the Montana Aeronautics Commission. The purpose of the program is continued development of a joint program of aviation education in the public school system and the University system of Montana.

Following is a brief outline of the sub-programs under the Aviation Education Program. The sub-programs function to achieve the general objective of promoting

aviation and aerospace education in our Montana schools.

Teacher Training

Three teacher work shops were conducted during fiscal year 1970; Northern Montana College, Eastern Montana College and Western Montana College. Total teacher enrollment was 77.

The summer teacher training program was extended in scope. The course at Western Montana College was a second level course in a new 3-level sequence.

Aviation Science

Six additional schools inaugurated Aviation Science courses into their curriculum during 1969-70 school year. The new courses were offered at Flathead High School, Billings West High School, Central Catholic High School in Billings, Victor High School, Lincoln County High School and Baker High School. The National Aeronautics and Space Administration Space-mobile lecture was scheduled for 29 schools.

Flying Classrooms

Six high schools participated in the Flying Classroom Program during the 1969-70 school year. 180 students participated. The classrooms were conducted with the assistance of the Aeronautics Commission aircraft and personnel. As each of these flying classrooms involved the direct participation and planning assistance of the Aviation Education Supervisor, this is a major program during the year. Assistance is also available to schools which have previously held flying classrooms.

Youth in Aviation Award

The Youth in Aviation Award contest involved 13 schools this fiscal year. The Aviation Education Supervisor administered local tests and state tests for this program and involved his participation during the greater part of the spring and summer. As a result of the FY-70 program, 39 students were awarded three hour cross-country flights; 12 students were awarded 10 hour flight instruction scholarships; and one private pilot scholarship amounting to 40 hours of instruction was awarded.

Elementary Education

In addition to development of elementary materials in summer courses, loan materials for elementary teachers are mailed through the office.

Vocational-Technical Training

The Supervisor participated as a member of the Aviation Advisory Committee for the Missoula Technical Center.

Materials Procurement, Development and Distribution

The office of the Aviation Education Supervisor acquires large numbers of free and inexpensive teacher aid material by surveying the aerospace industry and requesting bulk supplies. The materials are then passed on to teachers at the courses and seminars and in answer to individual requests. In addition to the numerous in state requests, the Supervisor answered information and material requests from 13 other states.

The office also develops curriculum guides and classroom material.

Publications/Information

A monthly publication entitled "Montana and the Sky" is sent to all registered pilots, flight operators, schools, news media, state and federal departments and aviation organizations in Montana.

The out of state courtesy mailing includes state and federal agencies and national aeronautics organizations. Courtesy copies are furnished to all interested individuals upon request.

The publication, averaging eight pages in length, features Montana aviation persons, organizations and activities. Attention is focused on national items of particular interest and technical features of special importance.

Circulation reaches approximately 5,000 annually.

The Airport Directory and Aeronautical Chart accomplished by the Airports Division of the Aeronautics Commission, are distributed through the Publications and Information portion of Safety and Education Division.

In addition to registered pilots, the two pilot aid publications are sent to tourist pilots upon written request, other state departments for the topography features of the chart, and schools, libraries and for use by students.

The Chart and Directory are also available to Montana flight operators for resale at a 25% discount.

"Businesslike Approach to Small Shop Work Orders" - a 30 page booklet written by former Director Charles A. Lynch was completed and distributed in October, 1969. The booklet is a guide to sound business practices and procedures in the aviation maintenance shop and is directed toward the smaller operation.

The booklet was distributed to all Montana maintenance shop operators and aviation departments of the other states and a few related schools. Requests have been received from numerous individual operators in-state and out-of-state, in addition to further requests from other state departments, schools and libraries.

Courtesy copies of the booklet are available, one to four copies, or may be purchased at 50¢ per book for an order of five or more.

A number of publications and aeronautical aids published prior to the past biennium are distributed upon request to airport managers, flight operators, other state departments and private organizations and individuals.

The number of tourist requests have steadily increased from out of state pilots planning vacations, hunting or fishing trips, and business visits. In answering the requests, a courtesy Chart and/or Directory is forwarded, all specific inquiries are answered relative to particular areas and recreational airports, and the appropriate brochures are forwarded concerning information on state and national parks, cities to be visited, fish and game information, and winter events.

Several hundred requests are complied with from out of state schools and colleges, state organizations, state and federal government agencies and state and national news media for miscellaneous material and aeronautical information.

Cloud charts and related informational materials are sent to Montana schools, libraries and individual students upon their request.

TARGET GROUPS:

The Target Groups of the Safety and Education Program vary within the sub-programs and various projects. The basic goal is Safety for the active aviation participant, the student pilot, the air-passenger public, Montana youth, the aviation interested Montana veteran, and the general public.

All forms of registration concern first, the active pilot, aircraft owner and/or commercial operator, however, they are enforced for the safety of all aviation users and the general public.

All sub-programs under the jurisdiction of aviation education are directed basically toward the youth of Montana. The teachers courses were initiated to better equip the instructors in presenting to the student the fundamentals of aeronautics and further their interest in all phases of aviation.

The Film Library Target Groups vary from the youth in our schools to the flying public in providing information on safety and new techniques to the communities and civic groups and finally to promotion of aviation and Montana to the out of state viewer.

The publications and aeronautical aids distributed by the Aeronautics Commission are directed foremost to the active flying participants and the industry. In addition, numerous publications are directed to the general public to assist their understanding of aviation and its role in the community, in the state and the nation. The tourist pilot is another important Target Group and the Commission provides considerable information and material in an attempt to encourage flying vacations in Montana.

COST SUMMARY:

The following data is presented in summary form. Additional supporting data is available upon request.

	Fiscal Years		
	1968-1969	1969-1970	1970-1971
Cost	\$ 104,583	\$ 83,850	\$ 117,538

AIRPORT DEVELOPMENT PROGRAM III -- 02

Designing and engineering a statewide system of airports involves the preparation and revision of the annual State Airport Program. The Airport Division staff advises and consults with Federal, State and local public officials and civic groups, to provide assistance in the planning of airport development. Some of the most important assistance comes in the form of financial consultation and the actual outlining of methods of financing for any proposed airport project. Many times the Airport Division of the Aeronautics Commission acts as agent for the local Airport Board or City and County Commissioners, in dealing with the Federal Aviation Administration and consulting engineers and contractors. The Airport Division administers policies and standards as applied to airport planning, site selection, design, specifications, construction, operation, maintenance, improvements and safety on all Montana airports.

The airport engineers in the Airport Division advise and assist owners and prospective owners of airports, both public and private, in the selection of new airport sites; taking into consideration terrain, soil, approaches, land availability and value, and other technical factors. The Airport Division assists consulting engineers who prepare most of the detailed airport construction plans for local Airport Boards, in determining financing and review of plans and specifications.

Many Airport Boards in the state will do certain airport improvements without the financial aid of the state or the Federal Government. They will at times call on the Aeronautics Commission to give them technical advice and minor engineering help when the local improvement is being done with volunteer men and equipment. A number of towns have taken advantage of this service and have indicated their appreciation.

Engineering Grants

The Aeronautics Commission has a limitation of \$5,000 annually for engineering grants in the amount of \$1,000 for each grant.

Engineering grants allowed during the fiscal year 1970 were:

MAC Proj. No. 292-7-69	Missoula	\$1,000
MAC Proj. No. 293-9-69	Miles City	\$1,000
MAC Proj. No. 294-12-69	Harlowton	\$1,000

MAC Proj. No. 295-4-70	Bozeman	\$1,000
MAC Proj. No. 296-5-70	Livingston	\$1,000

Loan Program

The Aeronautics Commission is able to loan money to a local Airport Board for development of any airport project.

Airport improvement loans are repayable annually at 4.5% interest. The length of the loan is for ten years or less. Communities or counties involved may use state funds along with available local funds for any particular airport project.

Airport improvement loan granted during fiscal year 1970:

MAC Proj. No. 292-7-69	Missoula	\$8,811
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General Aviation Utility Airports

Under this program a minimum but adequately safe airport facility is developed primarily for the use of general aviation in a location that does not have an airport. Construction costs are held to approximately \$30,000. The airport consists of one stabilized turf runway with parking apron, a segmented circle, wind cone, runway markers, and the property line fenced. The Aeronautics Commission has a consulting engineering firm retained through the Department of Administration and the Board of Examiners and in addition, contracts for construction. The sponsor, either a city, county or both, agrees to repay the State of Montana the equivalent of 2.5 mills based on the local high school district value and not to exceed \$10,000 over a ten year period for their share of the project cost. At the end of the ten year repayment period, the balance of the cost above the quarter mill per year, becomes a grant on the part of the state to the county or municipality involved.

Due to a budgetary reduction this program cannot allow a full airport development in all cases. The project may be divided into phases, which allow land acquisition first and later actual runway construction.

Engineering Services

Whenever a local Airport Board has a particular major construction project to accomplish, they retain a registered

Montana consulting engineer to render the engineering services desired. Whenever the Aeronautics Commission is in need of a consulting engineering firm to conduct a major engineering project on a state airport, the consulting engineer is retained on behalf of the Aeronautics Commission by the State Board of Examiners and Department of Administration.

Occasionally a local Airport Board, town or county, will want to accomplish an airport improvement project through the use of volunteer men and equipment. These projects are generally quite small and being volunteer projects, they usually do not have funds available for engineering services. In these cases the Aeronautics Commission will render engineering services by our Airport Division Engineers at the request of the local sponsor.

Any private airport owner whose airport is open to the public is eligible for technical assistance from the Aeronautics Commission. Special technical airport engineering assistance has been given to privately owned and public airports at most of Montana's 124 public airports.

Hospital Heliport Plan

In the fall of 1966 the Aeronautics Commission announced the inauguration of the "Hospital Heliport Program" in conjunction with the hospitals in Montana for the development of emergency heliports. Under the program the State Department will design and mark permanent hospital heliports on suitable hospital land, or roof tops, provided by the hospital administration. Construction cost is borne by the hospital.

Montana Aeronautics Commission hospital heliports are located at Kalispell, Cut Bank, Galen, Deer Lodge, with plans for units at Missoula, Whitefish and Swan Lake.

Interim Report

The Aeronautics Commission's engineering staff prepared an in-shop Interim State Airport Systems Plan which was completed and distributed during the fiscal year 1969. The plan describes the needed improvement at all Montana airports for the next ten years. Copies of the Interim report are available by interested groups or individuals upon request.

TARGET GROUP:

The Target Group of the Airport Development Program is the traveling public, not only Montana, but the entire nation. An adequately developed airport in any town is an asset to everyone. A good airport system in the state is as necessary as a good telephone system or road and highway system. The airport, large or small, assists first the air traveler; second, air freight, agriculture, commercial business, national defense, forest products and emergency measures. Airports play a major role in all forms of recreation and tourism.

Individual communities and counties as a whole benefit as one of the target groups by being assisted in the development of a good statewide system of airports.

COST SUMMARY:

The following data is presented in summary form. Additional supporting data is available upon request.

	Fiscal Years		
	1968-1969	1969-1970	1970-1971
Cost	\$ 186,078	\$ 286,903	\$ 399,449

AIRPORT OPERATIONS PROGRAM IV -- 03

State Airports

The Montana Aeronautics Commission has the statutory authority and responsibility to construct and maintain state-owned airports. These normally are confined to strategic locations due to: An aviation traffic need; adjacent to recreational areas; an emergency value due to a critical location on a high use VFR flight route; a location of convenience and necessity lending accessibility to the area.

These projects may be completed solely on a state basis or in conjunction with the Federal Aviation Administration under the Federal Airport Aid Program, or in conjunction with another department of the United States Government, or a local Airport Board, or other government bodies. All engineering, construction, contracting, inspection, ownership and costs and administration are under the jurisdiction of the Aeronautics Commission.

This state airport program was implemented in 1957 and since that time 14 projects have been initiated. State-owned and operated airports are located at: West Yellowstone, Lincoln, Dell, Babb, Browning, Ox Bow (Wolf Creek), Tiber Dam, East Poplar (Port of Scobey), Canyon Ferry (Townsend), Rock Creek (Clinton), Polebridge, Sweetgrass. The maintenance and operation of these twelve airports is a duty of the Airport Operations Program.

The Yellowstone Airport, the largest state-owned airport, is the only air carrier airport owned by the state.

The Yellowstone Airport project was financed with funds from the Federal Aviation Administration and the National Park Service. The Aeronautics Commission acted as sponsor of the project and is the administrator of the airport.

The total cost of the airport was \$1,282,690.44 and consists of a paved runway 8,400 feet in length, 150 feet in width, with a paved parallel taxiway and a complete medium intensity lighting system.

An apron extension project was completed in the calendar year 1968. The 250 feet by 500 feet extension makes the total paved apron area available, 250 feet by 1,800 feet. The terminal building houses a restaurant, offices for the flight operator, rent-a-car companies, two airlines

and a gift shop.

The airport is serviced by two major airline companies, Western Air Lines (service inaugurated in 1965) and Frontier Airlines (service inaugurated in 1967).

Airmarking

Montana has 230 roof tops airmarked throughout the state. These airmarkers are placed in the majority of the smaller towns. Many of the larger ranches in Eastern Montana are airmarked due to vast distances between cities. The higher mountainous areas throughout Western Montana are airmarked through a series of identification numbers on Forest Service look-out towers. There are 97 look-out towers airmarked.

Pilot Registration Desks

The State Board of Directors of the Montana Pilots Association made a suggestion to the Aeronautics Commission which was implemented in 1965. The Pilots Association suggested that the Aeronautics Commission provide a very simple self-supported pilot registration desk on every public airport in Montana that does not have a full time attendant. The purpose of these registration desks is to have a record of the aircraft and number of people that are using public airports throughout the state. This information can become valuable when a City or County Commission is deciding whether or not a suggested project on the airport would be justified through usage.

The Aeronautics Commission contracted with the State Parks Division to construct 50 of these units at a cost of \$28 each. The airmarking and airport maintenance summer crews installed the pilot registration desks.

Airport Name Stone Markers

The summer airport maintenance crew has placed stone markers on state-constructed, remotely located airstrips. The stone markers indicate the name of the airport, along with the field elevation. Using stones approximately 8 to 16 inches in size, the name letters are 10 feet high, painted bright yellow, and show up vividly from the air.

Fiberglass Cone Runway Markers

The Airport Division of the Aeronautics Commission designed a new cone runway marker for use on the general

utility airports. In the past, the Commission had used gravel and/or concrete flush-type runway edge markers. The flush markers were quite expensive, required a great deal of maintenance and were not visible during snow conditions. The Commission designed cone marker, fabricated by the Linton Corporation of Sidney, Montana, is made of fiberglass.

The cost of the cone marker is approximately \$8.50 while the concrete markers are priced as high as \$40 and when located in isolated areas the cost is even greater.

Wind Cone Standards

The Aeronautics Commission supplies prefabricated wind cone standards to public airports upon request. The standards are erected free of charge by the Commission and any approved public use airport that does not presently have a wind cone standard. Private use airports may purchase standard, installed, for \$150. At the close of 1970 there were a total of 70 wind cone standards installed on public use airports throughout Montana.

Directory

The Airport Division publishes an Airport Directory containing individual drawings of the public use airports in the state. The drawings show the airports in detail and their locations relative to the adjacent cities. The Directory contains technical information that is of vital importance to pilots flying in Montana.

Revisions are compiled and distributed on an annual basis.

Aeronautical Chart

The Aeronautics Commission publishes an air navigational chart which has proven to be of unlimited value to in state pilots and particularly beneficial to visiting pilots from out of state. The revised chart, bid and accomplished by Jeppesen Company of Denver, Colorado, was completed and distributed in December of 1967. Revisions are being compiled and the new chart will be available for distribution the latter part of the fall, 1970. The new chart will contain all current and updated aeronautical information. Completely new color photography will be incorporated on the reverse side of the chart to graphically

display to Montanans the advantages of flying in their home state while tempting and encouraging non-resident pilots to enjoy their flying vacations in Montana.

TARGET GROUP:

The Target Group of the Airport Operations Program is primarily that segment of the public utilizing aircraft for one or more of the following uses: Agriculture, forest products, mining, tourism and recreation, border crossing and for any local or civil disaster or emergency. The aircraft usage does not have to be direct, indirect usage is equally as important. More and better airport maintenance and operation increase the usability and the safety of all aircraft in flight thereby assisting and benefiting the public in general.

COST SUMMARY:

The following data is presented in summary form. Additional supporting data is available upon request.

	Fiscal Years		
	1968-1969	1969-1970	1970-1971
Cost	\$ 44,238	\$ 39,869	\$ 43,955

NAVIGATION AIDS PROGRAM V -- 04

The Montana Aeronautics Commission developed a program within the Airport Division for the purpose of providing instrument and visual navigational aids in locations that are not covered by the federal system. Eastern Montana and the Hi-Line area seriously need facilities to make cross-country navigation easier, more accurate and safer. The first state-owned nondirectional, low frequency, homer beacon was installed on the Shelby Airport and commissioned for service October 18, 1966. This H-marker facility has since been approved as an instrument flight rules aid and the voice facility is remoted into the Cut Bank FAA Flight Service Station.

During fiscal year 1970 new H-markers were installed at Broadus, Glendive and West Yellowstone. A total of 9 state-owned H-markers are now located in Montana. The 6 VFR installations are located at Plentywood, Malta, Jordan, Roundup, Broadus and Glendive. The 3 IFR installations are located at Shelby, Glasgow and West Yellowstone.

H-markers are proposed for Red Lodge, Hamilton and Polson. Future H-markers installed by the Aeronautics Commission must be co-sponsored by the local airport through an agreement.

Airway Beacons

The Federal Aviation Administration continues to operate 8 airway beacons in the western part of the state and has abandoned 29 airway beacons in Montana. The Aeronautics Commission obtained the abandoned beacons, 16 of which went to various airports and 12 were retained as airway beacons in their specific locations for continued use as navigational aids for night VFR flying.

The 12 mountain top airway beacons retained are located at:

Alberton	Canyon Resort	Stony Point
Avon	Hardy	Strawberry
Bonita	Spokane Hill	Whitetail
Boulder Hill	St. Regis	Wolf Creek

Airport Beacons

The Aeronautics Commission upon request by a local Airport Board assists in providing an airport beacon to any public airport installing a complete lighting system.

At the close of fiscal year 1970 Montana had 70 public airports with rotating beacons.

Anaconda	Glacier Park	Opheim
Ashland	International	Plains
Augusta	Forsyth	Plentywood
Big Sandy	Fort Benton	Polson
Big Timber	Geraldine	Poplar
Billings	Glasgow	Red Lodge
Bozeman	Glendive	Ronan
Bridger	Great Falls	Roundup
Broadus	Hamilton	Ryegate
Butte	Hardin	Scobey
Chester	Harlem	Seeley Lake
Chinook	Harlowton	Shelby
Choteau	Havre	Sidney
Circle	Helena	Stanford
Columbus	Hot Springs	Superior
Conrad	Jordan	Thompson Falls
Culbertson	Kalispell City	Three Forks
Cut Bank	Laurel	Townsend
Deer Lodge	Lewistown	Valier
Dell	Lincoln	West Yellowstone
Dillon	Livingston	White Sulphur
Drummond	Malta	Springs
Dutton	Miles City	Winifred
Eureka	Missoula	Wolf Point

Unicom Program

The Aeronautics Commission provides suitable VHF Unicom transceiver radio units for air-ground communications where there is a recognized need for the service on Montana airports and heliports.

"Unicom" is known as a private pilot's frequency. It is not to be used for air traffic control but it is intended to provide advisory service concerning condition of the runways, fuel and service available, wind conditions, availability of weather information, transportation, search and rescue and any other data required for safe and expedient operation of aircraft.

In each of the 53 Aeronautical Advisory Station locations, except the state-owned airport at West Yellowstone, the community provided one-half the cost of the new equipment with the Aeronautics Commission providing the other half. The radios are leased to the community for a five year term with the state providing installation, maintenance and licensing. The radios remain the

property of the State of Montana.

Modernization and replacement of early radio equipment was commenced in 1969 and has continued with new radios being installed at Roundup, Lewistown, and Broadus. Improvements were made at Chinook, Geraldine, Glendive, West Yellowstone, Butte and Chester.

A Unicom will be installed at Lincoln in the near future. Dutton and Philipsburg have expressed an interest in the program.

TARGET GROUPS:

The Target Groups for the Navigational Aid Program is first and foremost the pilots and navigators of aircraft. The aircraft might be privately owned or be a commercial air carrier, a military or a business aircraft. The secondary benefactors of a nav aids system are the passengers in the aircraft or the people the aircraft is serving. Regardless of the reason or purpose, the traveling public is again a target group. Thirdly, the cities and counties with airports are benefiting through the expertise, technical, and financial assistance of the Montana Aeronautics Commission's Nav Aids Program. Reliability and safety is the direct product of a good nav aids system thereby benefiting the public in general.

COST SUMMARY:

The following data is presented in summary form. Additional supporting data is available upon request.

	Fiscal Years		
	1968-1969	1969-1970	1970-1971
Cost	\$ 74,174	\$ 22,318	\$ 32,750

PROGRAM COSTS BY OBJECT OF
EXPENDITURE AND SOURCE OF FUNDING

1969-70 FISCAL YEAR

PROGRAM	ADMINISTRATION I --- 00	
	OBJECT OF EXPENDITURE	
	<i>PERSONAL SERVICES</i>	55,156.
	<i>OPERATIONS</i>	65,372.
	<i>CAPITAL</i>	24,282.
	<i>GRANTS AND BENEFITS</i>	
	<i>TOTAL EXPENDED</i>	144,810.
	SOURCE OF FUNDING	
	Earmarked Revenue Fund 218800	144,561.
	Revolving Fund 724400	249.
	<i>TOTAL EXPENDED</i>	144,810.

PROGRAM	SAFETY & EDUCATION II --- 01	
	OBJECT OF EXPENDITURE	
	<i>PERSONAL SERVICES</i>	49,701.
	<i>OPERATIONS</i>	31,880.
	<i>CAPITAL</i>	2,269.
	<i>GRANTS AND BENEFITS</i>	
	<i>TOTAL EXPENDED</i>	83,850.
	SOURCE OF FUNDING	
	Earmarked Revenue Fund 218800	83,850.
	<i>TOTAL EXPENDED</i>	83,850.

PROGRAM COSTS BY OBJECT OF
EXPENDITURE AND SOURCE OF FUNDING

1969-70 FISCAL YEAR

PROGRAM	AIRPORT DEVELOPMENT III --- 02		
OBJECT OF EXPENDITURE			
	<i>PERSONAL SERVICES</i>		53,138.
	<i>OPERATIONS</i>		20,454.
	<i>CAPITAL</i> Land - State Airports		65,415.
	<i>GRANTS AND BENEFITS</i>		147,896.
	<i>TOTAL EXPENDED</i>		286,903.
SOURCE OF FUNDING			
	Earmarked Revenue Fund	218800	249,442.
	Federal Grant	505400	37,461.
	<i>TOTAL EXPENDED</i>		286,903.

PROGRAM	AIRPORT OPERATION IV --- 03		
OBJECT OF EXPENDITURE			
	<i>PERSONAL SERVICES</i>		8,516.
	<i>OPERATIONS</i>		29,771.
	<i>CAPITAL</i>		1,582.
	<i>GRANTS AND BENEFITS</i>		39,869.
	<i>TOTAL EXPENDED</i>		39,869.
SOURCE OF FUNDING			
	Earmarked Revenue Fund	218800	1,686.
	Revolving Fund	724400	38,183.
	<i>TOTAL EXPENDED</i>		39,869.

PROGRAM COSTS BY OBJECT OF
EXPENDITURE AND SOURCE OF FUNDING
1969-70 FISCAL YEAR

PROGRAM	NAV AIDS V --- 04		
OBJECT OF EXPENDITURE			
	<i>PERSONAL SERVICES</i>		7,461.
	<i>OPERATIONS</i>		7,991.
	<i>CAPITAL</i>		6,866.
	<i>GRANTS AND BENEFITS</i>		
	<i>TOTAL EXPENDED</i>		22,318.
SOURCE OF FUNDING			
	Earmarked Revenue Fund 218800		14,347.
	Revolving Fund 724400		7,971.
	<i>TOTAL EXPENDED</i>		22,318.

PROGRAM			
OBJECT OF EXPENDITURE			
	<i>PERSONAL SERVICES</i>		
	<i>OPERATIONS</i>		
	<i>CAPITAL</i>		
	<i>GRANTS AND BENEFITS</i>		
	<i>TOTAL EXPENDED</i>		
SOURCE OF FUNDING			
	<i>TOTAL EXPENDED</i>		

